

BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer -yelahanka Division

Detailed Estimate

Name of the Work

Improvements of roads and drain at Attur layout in ward no.03 (Balance Roads)

Estimate Amount : 5000000.00

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
CIVIL WORKS									
1	Removing & Refixing Stone Slabs of drains and Pointing in C.M(1:3).								
	(Page No 25., I.No.5.33 of KPWD S.R 2016-17)								
		Sqm							
	Basic rate	76.00							
	Area Wiegth age @ 6%	4.56							
	Total Rate in Rs	80.56							
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)	L/s	1	359.30	0.85		305.41		
	Ch: (0 - 398)	R/s	1	359.30	0.85		305.41		
	8th Main road from yelahanka main road to dead end								
	Ch: (0 - 350)	L/s	1	317.70	0.85		270.05		
	Ch: (0 - 350)	R/s	1	317.70	0.85		270.05		
							610.81		
	Deduction for damaged 10%						-61.08		
							549.73	80.56	44286.17
2	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No142., I.No.19.1 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	82.00							
	Area Wiegth age @ 6%	4.92							
	Total Rate in Rs	86.92							
	Desilting								
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)	L/s	1	359.30	0.50	0.500	89.83		
	Ch: (0 - 398)	R/s	1	359.30	0.50	0.500	89.83		
	New Drain								
	8th Main road from yelahanka main road to dead end								
	Ch: (355 - 383)		2	28.00	1.05	0.800	47.04		
							226.69	86.92	19703.89
	KSRRB 4-1.2 : Providing and laying in position plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggretes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 (Page No 12., I.No.4.2 of KPWD S.R 2016-17).								
		Cum.							

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Basic rate	5046.00							
	Area Wleght age @ 6%	302.76							
	Total Rate in Rs	5348.76							
	New Drain								
	8th Main road from yelahanka main road to dead end								
	Ch. (355 - 383)		2	28.00	0.75	0.150	6.30		
							6.30	5348.76	33697.19
4	Providing and laying Plain /reinforced cement concrete for side drains wall and bottom thickness 15cm using M20 nominal mix concrete with OPC cement at 300kg with 20mm and down size granite metal coarse aggregate at 0.69 cum and fine aggregate at 0.43 cum machine mixed well compacted for walls at bottom including centring shuttering cost of materials HOM of machineries curing etc completeexcluding cost of steel as per MORTH specification No.1500,1700,2200 (Page No265., I.No.37.59.2 of KPWD S.R 2016-17).								
	Cum.								
	Basic rate	10408.00							
	Area Wleght age @ 6%	624.48							
	Total Rate in Rs	11032.48							
	New Drain								
	Raft								
	8th Main road from yelahanka main road to dead end								
	Ch. (355 - 383)		2	28.00	0.75	0.150	6.30		
	Wall								
	8th Main road from yelahanka main road to dead end								
	Ch. (355 - 383)		4	28.00	0.15	0.900	15.12		
							21.42	11032.48	236315.72
5	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500 (Page No 17., I.No.4.46.2 of KPWD S.R 2016-17).								
	Tonne								
	Basic rate	56050.00							
	Area Wleght age @ 6%	3363.00							
	Total Rate in Rs	59413.00							
	New drain								
	Taking 60kg/cum						1.29		
							1.29	59413.00	76357.59
6	Providing precast slab of 100 mm thick including cost of all materials, labour, curing, transportation, loading, unloading, etc., complete as per the direction of engineer in charge. Data rate								
	Sqm								
	Total Rate in Rs	1757.00							
	Damaged Portion								
			1	61.08			61.08		
	8th Main road from yelahanka main road to dead end								
	Ch. (355 - 383)		2	28.00	0.75		42.00		

No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
							103.08	1757.00	181113.32
Sub total-1									591473.88
ROAD WORKS									
3	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (Page No 143., I.No.19.14 of KPWD S.R 2016-17).								
	Cum.								
	Basic rate	46.00							
	Area Wiegth age @ 6%	2.76							
	Total Rate in Rs	48.76							
	new construction								
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)		1	359.3	4.00	0.400	574.88		
	8th Main road from yelahanka main road to dead end								
	Ch: (0 - 369)		1	336.7	4.60	0.400	619.53		
							1194.41	48.76	58239.33
4	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. Close graded granular sub-base material as per 400-1 For Grading- II Material (Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).								
	Cum.								
	Basic rate	1571.00							
	Area Wiegth age @ 6%	94.26							
	Total Rate in Rs	1665.26							
	new construction								
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)		1	359.3	4.00	0.150	215.58		
	8th Main road from yelahanka main road to dead end								
	Ch: (0 - 369)		1	336.7	4.60	0.150	232.32		
							447.90	1665.26	745874.95
5	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (Page No 158., I.No.20.18 of KPWD S.R 2016-17).								
	Cum.								
	Basic rate	1668.00							
	Area Wiegth age @ 6%	100.08							
	Total Rate in Rs	1768.08							
	new construction								
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)		1	359.3	4.00	0.225	323.37		

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	8th Main road from yelahanka main road to dead end						348.48		
	Ch. (0 - 369)		1	336.7	4.60	0.225	671.85	1768.08	1187892.50
16	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 (Page No 161., I.No.21.6 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	26.00							
	Area Wleght age @ 6%	1.56							
	Total Rate in Rs	27.56							
	new contruction								
	6th Main road from Yelahanka main road to dead end						1437.20		
	Ch. (0 - 398)		1	359.3	4.00				
	8th Main road from yelahanka main road to dead end						1548.82		
	Ch. (0 - 369)		1	336.7	4.60		2986.02	27.56	82294.71
17	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications MORTH/Chapter 5 (Page No 161., I.No.21.7 of KPWD S.R 2016-17).								
	Basic rate	11.00							
	Area Wleght age @ 6%	0.66							
	Total Rate in Rs	11.66							
	new contruction								
	6th Main road from Yelahanka main road to dead end						1437.20		
	Ch. (0 - 398)		1	359.3	4.00				
	8th Main road from yelahanka main road to dead end						1548.82		
	Ch. (0 - 369)		1	336.7	4.60		2986.02	11.66	34816.99
18	KSRRB M500- 17. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 (Page No 163., I.No.21.17.6 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	6071.00							
	Area Wleght age @ 6%	364.26							
	Total Rate in Rs	6435.26							
	new contruction								
	6th Main road from Yelahanka main road to dead end								
	Ch. (0 - 398)		1	359.3	4.00	0.050	71.86		

No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	8th Main road from yelahanka main road to dead end								
	Ch: (0 - 369)		1	336.7	4.60	0.050	77.44		
							149.30	6435.26	960790.75
13	KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandem rollers to achieve the desired compaction as per MORTH Table-500.9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 (Page No 165., I.No.21.22.6 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	6859.00							
	Area Wiegth age @ 6%	411.54							
	Total Rate in Rs	7270.54							
	new contruction								
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)		1	359.3	4.00	0.030	43.12		
	8th Main road from yelahanka main road to dead end								
	Ch: (0 - 369)		1	336.7	4.60	0.030	46.46		
							89.58	7270.54	651299.34
14	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 7kms. (Refer Table. Page No.140)								
		Cum.							
	Basic rate	90.40							
	Total Rate in Rs	90.40							
				For item no	2		226.69		
				For item no	3		1194.41		
							1421.10	90.40	128467.26
	Sub total-2								3849675.83
	ROAD FURNITURES								
15	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 185, I.No.24.15 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate ,	512.00							
	Area Wiegth age @ 6%	30.72							
	Total Rate in Rs	542.72							
	Road Marking								
	6th Main road from Yelahanka main road to dead end								
	Ch: (0 - 398)		2	359.3	0.10		71.86		

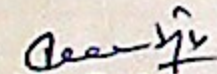
Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	8th Main road from yelahanka main road to dead end								
	Ch. (0 - 369)		2	336.7	0.10		67.34		
							139.20	542.72	75546.62
	Sub Total-3								75546.62
	Total								4516696.33
									45166.96
10	Cost towards Preperation of DPR,PMC/QC @ 1%								
13	Cost of Plastic@ 8% of bitumen qty for BC	Kg	1	1010.47				27.00	27282.67
									406502.67
14	Cost towards KIRDL Charges @ 9%								4351.37
15	Miscellenous and other charges								5000000.00
	Grand Total								

Certificate:-

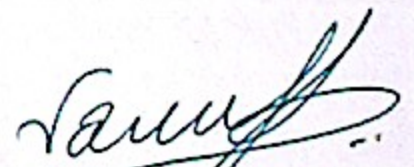
1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Consultant:

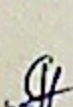
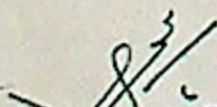
For M/s Mecadez core technologies pvt ltd


Asst. Engineer
Ward No:3
BBMP

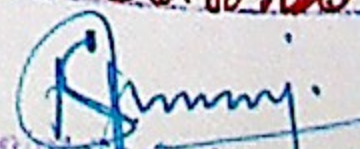

AEE
yelahanka Sub division
BBMP


Executive Engineer
yelahanka division
BBMP

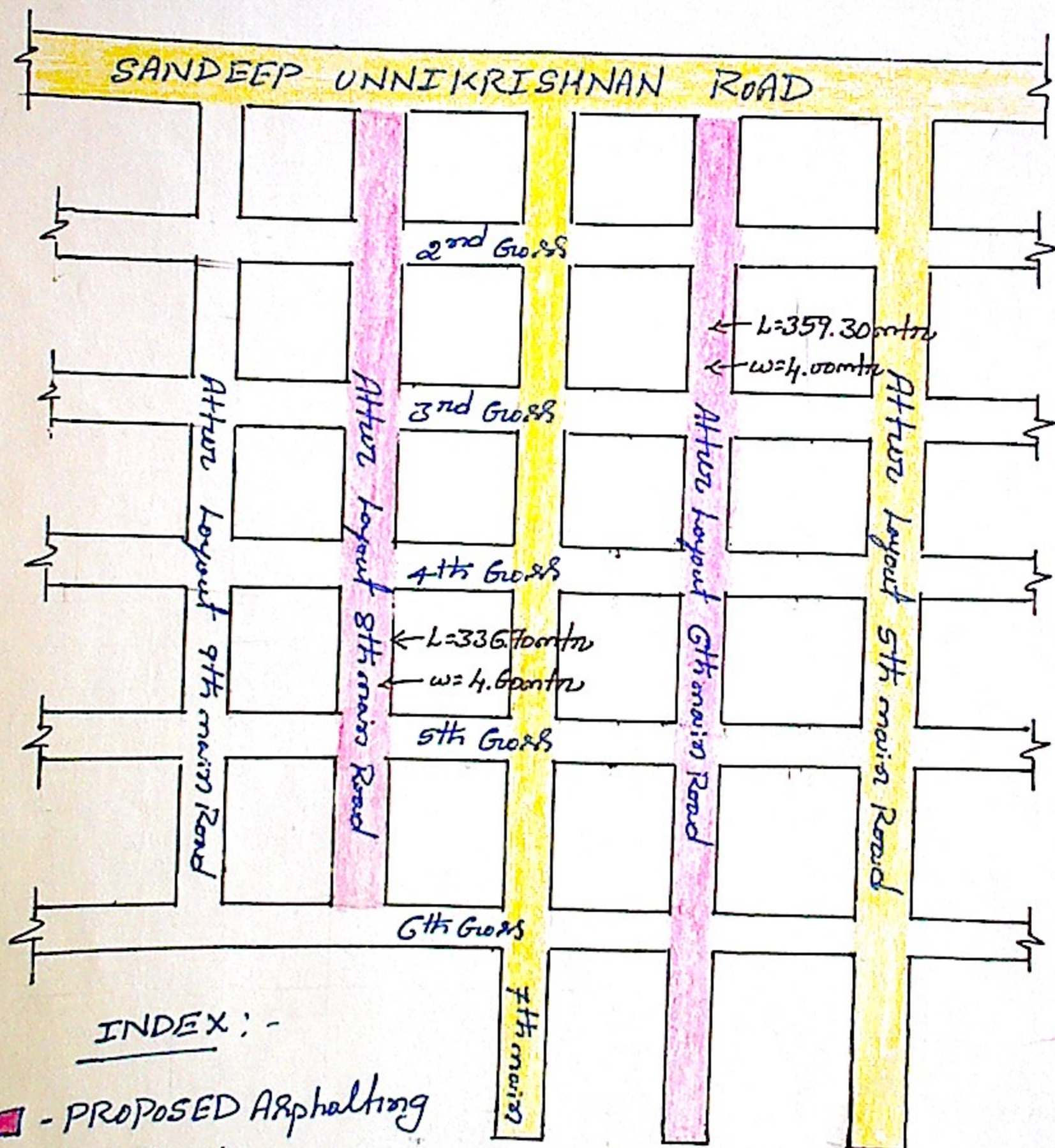
Technical Sanction
Accorded For 50.00 lakh Rs.
Head of A/C P-2178
CER NO 37 Dt: 27-5-17

 TA  CE (YNK)

ADMINISTRATIVELY SANCTIONED FOR Rs 50.00 lakh
Rupees fifty lakh.
Under P-2178
Registered as EE ()
Subject to conditions set out in
enclosed memo EE () No. 181
Dt. 27/5/2017
dated 5-5-2017 Rs 50.00 lakh


Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Name of work:- Improvements of roads and drains
at Attur layout in ward no-03 (Balance
Roads)



INDEX :-

- - PROPOSED Asphaltting Roads
- - Existing Asphaltting Roads

Drawn by AE-03

BRUHAT BANGALORE MAHANAGAR PALIKE
WARD: 3- ATTURU

150 - TELANGANA PC

